

LISTING OF THE CLAIMS

Claim 1 (original) A medical device comprising:
 a polymeric carrier fiber component, wherein the carrier fiber is capable of reversibly reacting with nitric oxide;
 a nitric oxide predrug; and
 a second fiber component, wherein said second fiber functions to sequester said predrug from reactive species.

Claim 2 (original) The medical device of claim 1, wherein the medical device is selected from the group consisting of a vascular graft, a stent, a catheter, and a wound dressing.

Claim 3 (original) The medical device of claim 1, wherein the polymeric carrier fiber component comprises at least one secondary amine moiety.

Claim 4 (original) The medical device of claim 3, wherein the polymeric carrier fiber component is selected from the group consisting of a polyethyleneimine, a polyethyleneimine grafted to a polysaccharide backbone, and a polyethyleneimine salt.

Claim 5 (original) The medical device of claim 3, wherein the polymeric carrier fiber component comprises a polyethyleneimine fiber.

Claim 6 (original) The device of claim 3, wherein the polymeric carrier fiber component comprises an electrospun nanofiber.

Claims 7-8 (cancelled)

Claim 9 (original) The device of claim 1, further comprising an activator.

Application Number: 10/597,272
Reply Dated May 25, 2011
Office Action Dated: February 25, 2011

Claims 10-12 (cancelled).

Claim 13 (original) The device of claim 1 further comprising a mobile phase.

Claim 14 (original) The device of claim 13, wherein the mobile phase is capable of transporting an activator such that it contacts the nitric oxide prodrug component.

Claim 15 (original) The device of claim 14, wherein the mobile phase is selected from the group consisting of water, methanol, ethanol, propanols, butanols, pentanols, hexanols, phenols, naphthols, polyols, acetic acid, N,N-dimethylformamide, dimethyl sulfoxide, dimethylacetami tetrahydrofuran, hexamethylphosphoramide de, and.

Claim 16 (original) The device of claim 1, wherein said second fiber is substantially hydrophobic.

Claim 17 (original) The device of claim 1, wherein the second fiber is selected from the group consisting of polyurethane, polyamide, polyethylene, polypropylene, polyesters, saturated polyesters, polyethylene terephthalate, polytetrafluoroethylene, perfluoroethylene, polystyrene, polyvinyl chloride, and polyvinyl pyrrolidone.

Claim 18 (original) The device of claim 1, wherein the second fiber component imparts additional strength.

Claim 19 (original) the device of claim 18, wherein the second fiber component imparts sufficient strength to permit the device to be free-standing devices without the assistance of a substrate.